

a derivative thereof, vegetable fat, or a combination thereof, and about 30% to about 60% by weight of non-cereal vegetable solids comprising finely ground particles having a size of about 80 microns or less, wherein the vegetable solids are dispersed in a continuous fat phase of the solid fat which serves as a matrix, at least one cereal-based component in an amount of up to about 40% by weight, and sugar in an amount of up to about 55% by weight, wherein the product has a stable shape and a confectionery texture to the product, with fat imparting a melt-in-the-mouth sensation when the product is placed in the mouth.

#### **REMARKS**

Claims 1-14 and 29-40, as amended, are pending for the Examiner's review and consideration. Claims 1 and 39 have been amended to recite that the fat component consists essentially of certain preferred fats. Claim 10 has been amended to recite that the fat consists of certain preferred fats. Accordingly, as no new matter has been added by these amendments, entry of the claims and the amendment as a whole is warranted at this time. Moreover, the marked-up amended claims are attached hereto as Appendix A, while a full set of pending claims is attached hereto as Appendix B for the Examiner's convenience.

Before addressing the claim rejections, Applicants believe that a brief summary would be helpful to highlight the important features of the present invention that are distinguished from the prior art. The present invention is directed to a confectionery product that has a vegetable solid content to provide nutritional content and includes fats including cocoa butter or derivatives thereof, vegetable fat, or a combination thereof, in amounts of at least 25 percent by weight to provide a confectionery texture. The confectionery of the present claims promotes vegetable consumption, especially for those who do not like the taste of vegetables. Thus, the advantages of the present invention is that it is a vehicle for vegetable consumption, while offering a pleasant taste and confectionery texture much like chocolate or other confectionery products.

Claim 7 was rejected under 35 U.S.C. § 112, first paragraph, as not being sufficiently described in the specification on page 2 of the Office Action. The Office Action states that the "page" referred to by the Applicant does not discuss anything about vegetable solids replacing a portion of the cocoa solids, sugar solids, or milk solids, or a combination thereof, in the chocolate. On the contrary, Applicants specifically referred to (*See, e.g.*, Specification at ¶ 11, lines 8-13). As this application was filed electronically, all cites to the specification in the prosecution have referred to paragraph numbers. Applicants referred to paragraph 11, lines 8-13 (*i.e.*, the paragraph bridging pages 4-5), where support for the

language of claim 7 is explicitly disclosed. This rejection is moot, and Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Claims 1-14 and 29-40 were rejected under 35 U.S.C. § 103(a) as being obvious over DE 2746479 to Bayer AG ("Bayer") for the reasons on pages 2-3 of the Office Action. Applicants understand the concern expressed in the Office Action, that the perception of taste is somewhat subjective, however, traverse the rejection for the following reasons.

Applicants' explanation that Bayer does not disclose the presently recited confectionery product that provides a pleasurable, tasty vehicle for vegetable consumption was merely to illustrate the surprising and unexpected results of the claimed invention. This surprising and unexpected feature of the claimed product is not technically recited in the claims, and therefore has not been relied upon for patentability. More importantly, the Office Action is flatly wrong when stating that the Bayer product contains the components as presently claimed.

Bayer discloses a confectionery with an adulterant consisting of dried beet, bran and Soya flour. Bayer does disclose that 5-70 percent of dried fiber can be used. The following examples are disclosed in the cited reference: Example 1 recites: 13% cocoa, 21% cocoa butter, 2% Soya flour, 20% whole milk powder, 29% sugar and 15% bran; Example 2 recites: 13% cocoa, 21% cocoa butter, 2% Soya flour, 20% whole milk powder, 29% sugar and 15% beet; Example 3 recites: 26% hazelnut, 14% cocoa butter, 33% sugar, 13% whole milk powder, 4% Soya flour, and 10% beet.

Bayer does not disclose or even suggest all the components of the present claims. Initially, the Office Action indicates that Example 2 of Bayer discloses more than the 25% fat recited in the claims, because the Office Action improperly includes the 20% "milk butter" with the 21% cocoa butter of Example 2. On the contrary, "milk butter" is not cocoa butter or a derivative thereof, vegetable fat, or a combination thereof, as presently recited. Therefore, it is not a fat as claimed, and cannot be considered as such, which means that Bayer still fails to teach inclusion of more than 21% of a fat including a cocoa butter or derivative, vegetable fat, or combination thereof. Therefore, Bayer does not disclose or suggest at least about 25 % by weight of the claimed fat component, as previously stated by Applicants.

To more clearly and distinctly recite the invention, however, Applicants have amended the claims to recite that the fat consists essentially of the recited components. This

language excludes components that have a material effect on the basic and novel characteristics of the claimed invention. A sufficient amount of cocoa butter or a derivative thereof, vegetable fat, or a combination thereof, must be present to provide proper crystallization to the present product. Milk butter, although it can be included in the product as an optional ingredient, cannot be used as a substitute for the basic fat content recited.

Milk butter undesirably alters the transition temperatures at which crystals form in the claimed fat component, as milk butter slows down the rate of crystallization and inhibits or prevents proper fat crystallization. This improper milk butter effect undesirably minimizes or eliminates the gloss, snap, and color desired in confectionery products, and also creates processing problems such as during molding. The low-melting temperature triglycerides in milk butter relative to cocoa butter and vegetable fats, if substituted for part of the claimed fat content, would effectively dilute the claimed fat content and undesirably soften the chocolate, which for example can cause shipping, storage, and eating problems. Moreover, milk butter substitution would facilitate the undesirable presence of chocolate bloom, which is a confectionery defect that occurs when fat melts and recrystallizes in the wrong form as blobs of fat on the surface of the product. The present invention recites certain fat components that should possess crystallization properties necessary for forming stable, shaped confectionery products (*See Specification*, ¶ 30, lines 6-9 and ¶ 32, lines 3-7). For these reasons, milk butter would materially and undesirably affect the required properties if used to substitute for any of the required 25% by weight of the claimed fat component. As such, Bayer still fails to teach the at least about 25 weight percent of a fat component that includes cocoa butter or derivatives thereof, vegetable fat, or combinations thereof, as presently recited.

Even if the identical components and the identical amounts were claimed and disclosed in Bayer, the different manner in which the claimed components are structured provides a patentable distinction to the present invention. Indeed, Bayer also fails to teach a fat component in the continuous phase or vegetable solids dispersed in such continuous phase, as presently recited. This helps provide the claimed confectionery product with the recited confectionery texture, as well as the melt-in-the-mouth sensation that is also presently recited in claim 39. Of course, the claims recite various components that are not disclosed or even suggested by Bayer, as discussed herein, in addition to this structural difference recited in claims 1 and 39.

In addition to the specific differences in the teaching of Bayer compared to the specifically recited components of the present invention, Bayer is directed to a confectionery

that includes an adulterant to improve digestion and reduce the sensation of hunger, *i.e.*, to *discourage eating*. It does not teach or suggest a confectionery product that provides a pleasurable, tasty, vehicle for vegetable consumption, designed especially to encourage children and others who do not like the taste of vegetables to increase their intake of such food (See, *e.g.*, Specification at ¶ 8). Thus, as a whole, Bayer teaches a product that inhibits eating, while the present invention recites a confectionery product that is designed to enhance and increase consumption of vegetables. This is the essence of a reference *teaching away* from a claimed invention.

Additionally, Bayer *as a whole teaches away* from the present invention in several ways. Example 1 discloses a confectionery with no vegetable component. Clearly, such disclosure suggests that vegetable component is only optional, since Bayer is not even concerned with increasing vegetable content or consumption in its product. Bayer cannot possibly suggest the surprising and unexpected benefits of the present invention, *i.e.*, increasing vegetable consumption. Moreover, Bayer is directed to reducing hunger pangs to inhibit food intake, which *teaches away* from including large amounts of fat content that would not be desired in such a formulation. The present invention, however, recites greater than 25% by weight of certain types of fat in addition to the nutritious vegetable solids. In addition to the other deficiencies of Example 2 as noted above, Example 2 also fails to teach that the vegetable solids are present in an amount of at least about 30 weight percent of the product. At best, Example 2 discloses a 21% cocoa butter and 15% beet powder, which clearly fails to disclose or suggest the present invention. Simply put, even if milk butter were improperly considered to be one of the presently recited fat components, at best Example 2 of Bayer would then teach that the vegetable solids content is lowered as the fat content is increased, which does not disclose or suggest the features of claim 2.

Although Bayer does disclose that beet cossettes can be finely ground, it fails to teach grinding particles to a size of about 80 microns or less--much less the surprising and unexpected benefits of doing so--as presently recited. Indeed, the claimed particle size surprisingly provides the continuous phase and proper dispersal therein, which facilitates providing the claimed confectionery texture to the claimed product. Bayer specifically states that particle size can be modified in any way so as to affect the *chewiness*. The present invention, however, obtains a smooth, melt-in-mouth sensation and mouthfeel as a result of the finely ground vegetable particles being properly *dispersed* in the fat matrix, which properties, size, and dispersed relationship to the fat component are not taught by Bayer. There is no teaching in Bayer that the specific size recited, *e.g.*, a magnitude of order smaller,

helps obtain the textural advantages of the present invention. The Office Action maintains that it would be obvious to optimize particle size for taste, however, that is not the primary reason the recited particle size is so surprisingly and unexpectedly important, as noted herein. More importantly, the "finely ground" size of beet cossette in Bayer may be a size that improves taste, but Bayer still provides no suggestion to modify particle size sufficiently to obtain the claimed texture characteristics in combination with the other recited features. Indeed, even if Bayer provides such motivation, it did not provide any expectation of success to one of ordinary skill in the art to successfully use a certain size particle to obtain the claimed dispersal and claimed confectionery texture.

Furthermore, several dependent claims have additional features that patentably distinguish the present invention from Bayer even more clearly. Claim 2 recites at least about 30 weight percent fat, which is almost 50% more fat from cocoa butter, derivatives, vegetable fat, or a combination thereof than the maximum taught by Bayer. Claim 7 recites that the product is formed from modified chocolate, wherein at least a portion of the cocoa solids, sugar solids, or milk solids, or a combination thereof, has been removed and replaced with vegetable solids. As discussed above, this is explicitly supported by the specification and provides a patentable advance over Bayer by solving a long-felt problem in the art. Indeed, Bayer even *teaches away* from this substitution by expressly disclosing that chocolate should be mixed in molds or slabs with dietary fiber to form the Bayer invention. Even Example 3 of Bayer fails to teach such a replacement based on chocolate, as it simply discloses combining cocoa butter with dietary fiber and a few other ingredients. The mere presence of cocoa butter without disclosure of cocoa mass does not suggest the feature recited in claim 7. Claim 10 now recites that the fat consists of specific materials, none of which are taught in the proper amount by Bayer. Claim 13 recites a combination of vegetables in the solids, which can provide unique mixtures of vegetable material in a desirable, edible form. Bayer fails to teach the features of claim 13, as it discloses beets as a dietary fiber and fails to suggest any other vegetables at all, much less the inclusion of a combination thereof. Claim 13 provides the wonderful advantage of providing multiple types of vegetables into the dietary intake of consumers.

In sum, Bayer does not disclose or suggest a confectionery product with a fat content above 25 weight percent, particularly a fat consisting essentially of cocoa butter or a derivative thereof, a vegetable fat, or a combination thereof, so as to impart a confectionery texture to the product. Bayer also does not teach grinding vegetable solids to a size of about 80 microns or less for confectionery texture purposes, which the Office Action implicitly

acknowledges by indicating that taste perception is the reason one of ordinary skill in the art might optimize particle size. Accordingly, Bayer has different components and a different form from those recited in the present invention, in addition to teaching away from the recited invention. Thus, Applicants respectfully request that the rejection of claims 1-14 and 29-40 under 35 U.S.C. § 103(a) be reconsidered and withdrawn, since no *prima facie* case of obviousness has been shown on the record.

Applicant submits that the entire application is now in condition for allowance, early notice of which would be appreciated. Should the Examiner not agree, then a personal or telephonic interview is respectfully requested to discuss any remaining issues and expedite the eventual allowance of the application.

A Petition for Extension of Time, with provision for the required fee, has been submitted herewith to extend the time for response one month to and including October 4, 2002.

No fee is believed to be due for this submission. Should any fees be due, however, please charge such fees to Winston & Strawn Deposit Account No. 501-814.

Respectfully submitted,

Date: 9/30/02

  
Jeffrey A. Wolfson

(Reg. No. 42,234)

For: Allan A. Fanucci

(Reg. No. 30,256)

**WINSTON & STRAWN**

**Customer Number: 28765**

(202) 371-5770



## APPENDIX A: MARKED UP VERSION OF AMENDED CLAIMS

1. (Three Times Amended) A confectionery product comprising:  
a mixture of at least 25% by weight of solid fat which consists essentially of  
[comprises] cocoa butter or a derivative thereof, vegetable fat, or a combination thereof, and  
at least 15% by weight of non-cereal vegetable solids finely ground to a size of  
about 80 microns or less that are dispersed in a continuous fat phase of the solid fat which  
serves as a matrix for the vegetable solids to form a stable shape for the product and to impart  
a confectionery texture to the product.

10. (Twice Amended) The confectionery product according to claim 1,  
wherein the fat consists of [comprises] cocoa butter, cocoa butter equivalent, cocoa butter  
replacer, crystallizable vegetable fat, and mixtures thereof.

39. (Twice Amended) A confectionery product comprising a mixture of  
solid fat in an amount of at least 25% by weight, which consists essentially of [comprises]  
cocoa butter or a derivative thereof, vegetable fat, or a combination thereof, and about 30% to  
about 60% by weight of non-cereal vegetable solids comprising finely ground particles  
having a size of about 80 microns or less, wherein the vegetable solids are dispersed in a  
continuous fat phase of the solid fat which serves as a matrix, at least one cereal-based  
component in an amount of up to about 40% by weight, and sugar in an amount of up to  
about 55% by weight, wherein the product has a stable shape and a confectionery texture to  
the product, with fat imparting a melt-in-the-mouth sensation when the product is placed in  
the mouth.

RECEIVED

OCT 02 2002

TC 1700